National Emergency Services Academy, Civil Air Patrol
Aircrew Briefing Guide

This Briefing Should...
Take no more than 10 minutes
Be Conducted With the Entire Crew
Occur After Mission Planning Is Complete

Only brief asterisked items (*) if applicable to the specific mission

1. Roll Call
Introduction
Currency
Check ID Cards and Documents
Time Hack

2. Flight Planning
Takeoff/Landing Performance
Current Charts
Airport Facilities Directory
Aircraft Tail Number and Callsign
Flight Plan
NOTAMS
Weather

3. Safety
"Knock It Off" or "This is Stupid" Climb to a safe altitude immediately
I'M SAFE Checklist
Operational Risk Management
Pilot Flies to Avoid Target Fixation
Observers Call Traffic on Clock (60% accidents occur at uncontrolled fields)
Honor Ingress/Egress Altitudes
Remove Rings and Jewelry

4. Emergencies
Climb if Possible
Critical - Engine Failure - Land
Non-Critical - Climb and Work it out
Observer Runs the Checklist
Birdstrike - Both On Controls and Climb
Controllability Check - If Structurally Damaged
Engine Failure - Crash Position/Open Doors
Egress - Observer Grabs Extinguisher, Scanner Exits Pilot's Side (Seat is forward), Pilot exits observer door (seat still aft), avoid prop, meet at 12 O'clock
Engine Fire On Start - Radio Call for Fire Trucks
Night Electrical Failure - Observer Spots the Airspeed with the flashlight

Physiological Incident

5. Hazards
Route - Birds, Aircraft, Airports, Aircraft Transitioning to other search areas, IR/VR Routes, Victor Airways
Terrain - Mountains, Climbing Terrain, Towers
Safe Altitude on Chart - Rounded Up to 100 feet plus 100 feet, set a minimum altitude for emergencies
Night/Poor Visibility Disorientation
Airsickness and Dehydration

6. Crew Duties
Positive Aircraft Control
Two Challenge Rule
Call 100 feet, 10 kts, 1/4 mile and not correcting
Seatbelts on at all times, door and seat belt operation, no smoking
GPS and Radios
Don't Look for a missing aircraft, look for reflections, trash, burn marks, foliage discoloration, parts, etc.
Sterile Cockpit In Critical Phases of Flight No non-mission related discussion)
Who Closes Flightplan

*7. Communications
Comm Flimsy Complete
Freqs
Callsigns (Victor CAPF, FM Sortie #)
Recall Codewords
Check In Times (Use a timer) Consider Ops normal with location
Radio Checks in chocks/Takeoff/Landing
Don't Transmit the Find Until We Discuss It
Has local law enforcement been contacted to provide transportation on remote missions without ground team support

*8. Mission Profile
Search Area
Search Altitude (MSL/AGL)_____
Top Search Altitude
Track Spacing ___ What Lat/Longs?
Time In Transit _____
Time On Station ____
Emergency Safe Altitude____
Ingress/Egress Altitudes_____ Consider Overflight for SA
Search Airspeed ___ Flaps ___
Go West to Increase Lat/Long Numbers When Flying, SE corner, 7.5 North, 7.5 West
North and South Tracks

Aux Field Information Reviewed
Rendezvous Information on Comm Flimsy
Aircraft Will Fly Daisy Chain at 75-90 Kts over GT
Independently Plot Lat/Long and Compare
Turns inside grid vs outside (gives observer a break)

*9. Electronic Search
SARSAT Coordinates
Listen on Nav/Comm with Squelch Off
Set Intensity on LPER
Cardinal Headings/Box Methods
Poor Visibility Consider a Wedge of Airspace Off Navaid
with DME Defining Ends
Brief Altitudes
Discuss Lobes and Circle the Target to Verify Location
Wing Null, Set Volume to Clock Position
Contact Local Law Enforcement For Support

*10. Comm Out Air-to-Ground Communications
GT Will Signal Comm Failure By Stopping (Day)
GT Turn Off Headlights/Activate Flashers (Night)
Ground Team Will Turn in Direction of Aircraft at
Intersections
GT will Monitor 122.775 on LPER for Backup
GT Will Wave for Message Received (Day)
GT Will Flash Headlights for Message Received (Night)
A distant circling aircraft means travel to that position
Flashing Landing Light Indicates Message Received

*11. Airdrop (Only to Prevent Loss of Life)
Prep Kit with Surveyors Tape or glowstick (at night)
Fly a Traffic Pattern Into the Wind at 800 Feet
Look for Threats and Hazards
Establish a Stable Platform (75 Kts/10 Degrees)
2 Mile Final with "Left Turn, Right Turn" and
"Stop Turn" from Observer
Descend to Drop Altitude
Observer Preps the Drop, Window Open
Release Streamer Prior to Target
Release Kit When Over Target (Forward throw will
throw kit past them for Safety Reasons)
Do not climb or it could hit the tail
Do not positive G
Do not attempt to air score over pilot's shoulder

*12. Low Level Disaster Relief Flight

Plot legs and determine controlling obstacles
Determine a minimum safe altitude providing 100 ft clearance
Set minimum altitude limits for each leg
Brief Crew on Visual Cues
Attempt to fly route one direction high alt then reverse course lower

*13. Proficiency Flight Profile
Discuss Objectives
Sequence of Events
Discuss Simulated Emergencies
Safety Limits

*14. Orientation Flight Consideration
Complete Uniforms and ID cards for all Cadets
Review night and weather flight restrictions
Review Emergency Egress on the Ground
Demo Emergency Egress if the Cadets Have not Seen A Demo
Discuss Ways to deal with Airsickness
Discuss Flight Profile and Seat Swap

15. Survival
Equipment Review
Treat For Shock (Water)
First Aid
If remote stay with aircraft
Signal (Fire, Mirror, CD, Signal Panel - CLASS)
Activate ELT (Describe Operation)
Will to Survive

16. Emergency of the Day (Select the Calendar day and Briefly Discuss Your Actions)

1. Engine Fire During Start
2. Lost Gas Cap In Flight
3. Inadvertent IMC
4. Electrical Failure At Night
5. Pitot/Static Failure
6. Vacuum Failure
7. Engine Fire in Flight
8. Bird Strike
9. Aborted Takeoff
10. Carbon Monoxide Poisoning
11. Elevator Locks in Flight
12. Hypoxia
13. Ditching
17. Radio Failure
18. Flap Failure
19. Cabin Fire
20. Electrical Fire
21. Engine Roughness
22. Vibration in Flight
23. Aborted Takeoff
24. Loss of Oil Press
25. Engine Temp Fail
26. Low Vacuum
27. Ear Blockage
28. Power Loss
29. Thunderstorms

14. Turbulence Penetration
15. Carb Icing
16. Fuel Starvation
30. Lost Procedures
31. Radio Failure

17. Communications Flimsy - Fill Out As Much as Necessary to Ensure You Can Accomplish the Mission--Designed as a Reminder to help Gather Data

Aircraft Tail _____
Aircraft Callsign_____
Mission Base Callsign_____
Mission Base Phone_____
Base Freq's _____
GT Callsign_____
Wing HQ Phone_____
AFRCC Phone 1-800-851-3051
GT Vehicle Description_____
_____
GT Rendezvous Location _____
_____
_____
_____

Rendezvous Time Window Starts at
_____ and Closes at _____

Time Hack 202-762-1401
303-499-7111
762-4101 (DSN)

Codewords _____
_____
_____

Notes: